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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,002	10/24/2003	Jussi Ruutu	NOKM.076PA	9364
40581	7590	08/23/2005	EXAMINER	
CRAWFORD MAUNU PLLC 1270 NORTHLAND DRIVE, SUITE 390 ST. PAUL, MN 55120			BLOUNT, STEVEN	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/693,002	<b>Applicant(s)</b> RUUTU ET AL.	
	<b>Examiner</b> Steven Blount	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1 - 20 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 2 and 13 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application 20030112756 to Le Gouriellec et al.

With regard to claim 1, Le Gouriellec et al teach monitoring a congestion level (see watermark on page 3 par 0035) wherein packets are sent to other network entities and discarded by other switching nodes “in case of congestion”. See par 0028. Although the edge marking is not explicitly stated to be a “QOS function”, one of ordinary skill in the art would recognize that this is an obvious function for providing quality of service.

With regard to claims 2 and 13 – 16, see the previous Office action.

3. Claims 3 – 7 and 17 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application 20030112756 to Le Gouriellec et al as applied to claims 1 – 2 and 13 – 16 above, and further in view of U.S. patent 6,631,135 to Wojcik.

With regard to claim 3, Le Gouriellec et al teach the invention as described above, but do not teach storing the QOS actions taken. This is taught in Wojcik. See how the profile is stored.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have stored the QOS data in Le Gouriellec et al in light of the teachings of Wojcik in order to provide a means for using historical data to provide guidance to the QOS that needs to be applied to the system.

With regard to claim 4, prioritizing according to time is taught in the abstract.

With regard to claim 5, see col 3 line 5.

With regard to claims 6 – 7, the QOS information is signaled between the elements, and out of band transmission would be an obvious way to send it.

With regard to claims 17 – 19, see the discussion above.

With regard to claim 20, see the rejections above and note that it would be obvious to one of ordinary skill in the art to implement the invention of Le Gouriellec et al/Wojcik in software in order to insure its repeatability.

4. Claims 8 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application 20030112756 to Le Gouriellec et al as applied to claims 1 – 2 and 13 – 16 above, and further in view of U.S. patent 6,252,848 to Skirmont.

Le Gouriellec et al teaches the invention as described above, but does not teach acting upon the packets with varying degrees of preference. This is taught in Skirmont. See how the drop priority is determined based upon flow profile (col 5 line 10), wherein the QOS action is the drop precedence assigned to the packets. It would have been obvious to one of ordinary skill in the art at the time of the invention to have treated the different packets in Le Gouriellec et al differently and dropped them with different

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priority, in light of the teachings of Skirmont, in order to provide a means for providing greater control over the flows in Le Gouriellec et al.

With regard to claim 9, see figure 2 of Le Gouriellec et al.

With regard to claim 10, see the discussion of marking in Le Gouriellec et al.

With regard to claim 11, see the discussion above.

With regard to claim 12, again see the discussion of marking above.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,535,482 to Hadi Salim et al.

Hadi Salim et al teaches having a first network entity (router A) perform a QOS action (discard) which is then communicated to a second network entity, and a subsequent entity, the effect altering the congestion processing in the second and subsequent entities. See col 6 lines 60+ and note that in col 7 lines 1+, it is stated that the second router sends a message to the TCP source as well. Although the "congestion level" is not explicitly stated to be monitored, one of ordinary skill in the art would recognize that this is what is implied, or an obvious variation of it, in col 6 lines 60+.

6. Applicant's arguments have been fully considered but they are not persuasive. The examiner disagrees with the assertion that the edge marking is not a QOS action. In Par 28, it is stated that marking is done "to control network traffic traversing the oversubscribed LSP." Also, the fact that the marked packets travel to other internal nodes is indicative of the fact that the QOS action is migratory. Again, see paragraph 28.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 - 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ajit Patel  
Primary Examiner

SB



8/19/05